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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,175	04/27/2001	Warren M. Farnworth	MI22-1703	4157
21567	7590	09/28/2005	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			KOBERT, RUSSELL MARC	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/844,175

Applicant(s)

FARNWORTH ET AL.

Examiner

Russell M. Kobert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-42, 54-65, 67-70 and 75-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-42, 62, 63, 67, 68, 75, 77, 78, 81, 82, 85 and 86 is/are allowed.
- 6) ☒ Claim(s) 54-61, 64, 65, 69, 70, 76, 79, 80, 83, 84, 87 and 88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0705, 0605, 0305 & 1204
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. The indicated allowability of claims 54-61, 64, 65, 69, 70, 76, 79, 80, 83, 84, 87 and 88 are withdrawn in view of the newly discovered reference(s) to Farnworth et al (5523697) and Marcus et al (5201992). Rejections based on the newly cited reference(s) follow.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "an apex in the form of a knife-edge line and comprising semiconductor material and sized and positioned to penetrate a single conductive pad," as recited in claim 54, wherein "an apex" is understood to be one and only one apex (not a plurality of apexes) must be shown or the feature(s) canceled from the claim(s). Additionally, "an apex in the form of a knife-edge line and comprising semiconductor material and sized and positioned to engage the single conductive pad," as recited in claim 79, wherein "an apex" is understood to be one and only one apex (not a plurality of apexes) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Claims 54-61, 64, 65, 69, 70, 76, 79, 80, 83, 84, 87 and 88 are objected to because of the following informalities:

The drawings fail to show the broadest reasonable interpretation wherein "an apex" is interpreted to mean one and only one apex (not a plurality of apexes), "in the form of a knife-edge line and comprising semiconductor material and sized and positioned to penetrate a single conductive pad," as recited in claim 54. The drawings also fail to show the broadest reasonable interpretation wherein "an apex" is interpreted to mean one and only one apex (not a plurality of apexes), "in the form of a knife-edge line and comprising semiconductor material and sized and positioned to engage the single conductive pad," as recited in claim 79.

Appropriate correction is required.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

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F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 54-61, 64, 65, 69, 70, 76, 79, 80, 83, 84, 87 and 88 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 26-33 of U.S. Patent No. 5523697 in view of Marcus et al (5201992). In claim 26 of Patent No. 5523697 (hereafter referred to as the '697 patent), the test substrate is the same as a penetration stop plane and claim 26 further states that the engagement probe has an outer surface comprising an apex in the form of at least one knife-edge line sized and positioned to engage the single test pad that recites the structural features of claim 54 of the instant application. Although the '697 patent does not explicitly claim that the engagement probe is made of semiconductor material, Marcus et al discloses a probe structure made of semiconductor material throughout its specification. It would have been obvious to one having ordinary skill in the art to have used the teaching according to Marcus et al to make the probe structure of the '697 patent comprising a semiconductor material (silicon) because Marcus et al teach that fabrication of miniaturized tapered structures using silicon technology is considered particularly advantageous (col 1, ln 58-68).

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 54, 61, 64, 69, 70, 76, 79, 80, 83, 84, 87 and 88 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Marcus et al (5201992). (In Marcus et al, note alternative structures, wedge- or ridge-shaped at column 1, lines 14-24 and column 5, lines 1-4).

8. The following is a statement of reasons for the indication of allowable subject matter:

Claims 31-42, 62, 63, 67, 68, 75, 77, 78, 81, 82, 85 and 86 continue to be allowable for the reasons previously made of record and the added comments stated as follows:

Applicants' further explanation (see page 9, lines 8-15 in the Remarks filed June 17, 2004) of "an apex in the form of a knife-edge line," that is a limitation of claims 31 and 77, in the Amendment filed June 17, 2004 presents a convincing argument over the rejection under 35 U.S.C. 112. Based on Applicants' description and clarification in the Amendment filed June 17, 2004 of the boundaries of the claimed limitation of "an apex

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in the form of a knife-edge line," a polyhedron known as a *triangular prism* best characterizes the geometry to that which this limitation is drawn to. In view of this understanding of Applicants' construed description of what "an apex in the form of a knife-edge line" is, in combination with the remaining limitations of claims 31 and 77, the claimed invention according to claims 31 and 77 has not been found. Moreover, It is further noted that the examiner's reasons are understood to be predicated upon consideration of each of the claims as a whole, and not upon any specific elements of the claims.

9. A shortened statutory period for response to this action is set to expire three month(s) from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kobert whose telephone number is (571) 272-1963. The Examiner's Supervisor, Nestor R. Ramirez, can be reached at (571) 272-2034. For an automated menu of Tech Center 2800 phone numbers call (571) 272-2800.



Russell M. Kobert  
Patent Examiner  
Group Art Unit 2829  
September 21, 2005



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PRIMARY EXAMINER  
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09/23/05